

## CLAIMS FOR A PATENT

## [CLAIM 1]

A door open-close device for control of a lock mechanism of a door by a circuit housed in a door handle, the door open-close  
5 device comprising:

a lock switch connected to an external circuit so as to control the external circuit; and

an antenna disposed to have a gap toward the lock switch and press down the lock switch at a time of deforming by being  
10 grasped by an operator, the antenna including a core portion of a soft magnetic material having flexibility and a conductor wound around the core portion, the conductor being connected to the external circuit so as to communicate with an external portable device.

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## [CLAIM 2]

The door open-close device of claim 1, wherein the antenna further including a cover handle configured to be installed in the door handle, the cover handle having the core portion and the  
20 conductor sealed in.